## marcl GantrySystem



The marc1 GantrySystem, when combined with the StepDot or other marco piezo valves like the sJet, becomes a dispensing robot that can follow precise paths and curves in all axes.

The marc1 GantrySystem dispenses small amounts of media, such as solder paste, silver epoxy, or underfill. It combines advanced robot technology with a sophisticated dispensing control system, the Dispensing Control Unit (DCU), which controls both dispensing and motion simultaneously. This feature is unique in the dispensing industry.

The design is both solid and lightweight, with a tool load capacity of up to 10 kg. It enables precise high-speed dispensing with accelerations up to 3g, while maintaining consistent repeatability.

marco offers complete solutions for various applications with the marc1 GantrySystem. This gantry combines a large work surface with a compact footprint.

The swiveling HMI touch display and foldable keyboard make operation easy.

The three axes of the machine have five linear motors, each of which is equipped with a newly developed, patented watercooling system. This intelligent thermal control system ensures temperature stability, which in turn guarantees consistently high precision throughout the dispensing process.

The machine features a large glass door at the front for easy access, with openings on the right and left to allow integration into an inline production line (SMEMA-compliant interface). The rear opening is designed for a cluster arrangement. Additionally, the robot is compatible with cleanroom environments.

The marc1 GantrySystem can be easily customized to meet changing customer requirements for media, air, and coolingwater supply due to its modular design. The cell and machine bed come with numerous pre-installed pneumatic and electronic interfaces, allowing for quick integration of additional units and tools.

## **Technical data**

- Dimensions in mm (W/D/H): 800 x 950 x 1800
- Traverse the X/Y/Z\* axes paths in mm: 470 x 480 x 120
- The weight of the basic version is 650 kg (lightweight construction)
- Tool weight: up to 10 kg
- $\bullet$  Acceleration\*: up to 3q in all axes
- Reproducibility\*: ± 3 μm
- Openings for cluster or inline set-up in mm:
  - 640 x 520 (W x H) for front door opening
  - 460 x 190 (W x H) for side openings
  - 445 x 185 (W x H) for rear opening

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<sup>\*</sup> Depending on the dispensing solution